v. February 27, 2004

Maintenance Aviation Safety Action Program (ASAP) Questionnaire (MAQ)

Dear Participant:

Under an FAA-sponsored research project, Dr. Manoj S. Patankar of Saint Louis University is conducting a survey of aircraft mechanics, maintenance managers, and FAA inspectors **to quantify the factors that may contribute toward the success or failure of an Aviation Safety Action Program (ASAP) in maintenance organizations**. Your participation in this study is very important. **Even if you have never heard of ASAP, please take a few minutes to respond to items that may apply to you.**

This questionnaire is being sent to a **randomly selected sample** of Aircraft Mechanic Certificate holders that was obtained from FAA's Airman Certificate Database. For example, if there are 15,000 mechanics, in a particular state, a randomly selected group of 1000 mechanics will receive this questionnaire. **The more people respond to this survey, the greater the reliability of our conclusions**. Therefore, we urge you to kindly take a few minutes to fill out this questionnaire. Once you have finished answering the questionnaire, please mail it directly to Saint Louis University via the enclosed postage-paid envelope.

Although demographic data such as position, years of experience, and year of birth are requested, **there is no way to identify individuals who participate or don't participate in this survey. Please keep all responses anonymous.** If we don't get enough responses to this survey, you will need to send out another questionnaire. In order to minimize the cost of this project, we urge you to respond to the first mailing.

Although this questionnaire appears to be very long, you don't have to respond to all the questions. Use the following instructions to determine which questions you need to answer:

1. Respond to all items in Section I: BACKGROUND INFORMATION
   Section II: EMPLOYEES OF ALL ORGANIZATIONS, INCLUDING FAA
2. Are you an FAA inspector/employee?
   a. If YES, complete Section III: FAA EMPLOYEES ONLY
   b. If NO,
      Does your company offer a Maintenance Aviation Safety Action Program? If you don't know, please ask your supervisor or your shop steward.
      1. If YES, complete Section IV: EMPLOYEES OF ORGANIZATIONS **WITH** ASAP PROGRAMS
      2. If NO, complete Section V: EMPLOYEES OF ORGANIZATIONS **WITHOUT** ASAP PROGRAMS

The alternative to participation is non-participation. If you decide to not participate in this study, simply discard this survey and the enclosed postage-paid envelope.

This project is approved by the Saint Louis University's Institutional Review Board from the Human Subjects protection perspective. If you have any questions about this study please contact Dr. Manoj Patankar at patankar@slu.edu or 314-977-8355. Thank you for your time and consideration.

I. BACKGROUND INFORMATION: Today's Date: ___/___/___

1. Select Employer Type (Select all that apply):
   ☐ Major Air Carrier ☐ FAA-Approved Repair Station ☐ Corporate or General Aviation Operator
   ☐ Commuter Airline ☐ FAA ☐ Other: _____
2. Job Title: ☐ Mechanic ☐ Inspector ☐ Other: _____
   ☐ Manager ☐ FAA Inspector
3. Years at current employer: _____
4. Years in current position: _____
5. Years of aviation experience: _____ (total)
6. Present Shift: ☐ Day/First Shift ☐ Swing/Second Shift
   ☐ Midnight/Third Shift ☐ Not on Shift-duty
7. Gender: ☐ Male ☐ Female
8. Year of birth: _____
9. City and State: _____ (OPTIONAL)
10. Highest Education Level: ☐ High School ☐ Trade School ☐ A.S./A.A. ☐ B.S./B.A. ☐ M.S./M.A. ☐ Doctoral
11. Work Location:
    ☐ Line ☐ Hangar ☐ QC/QA
    ☐ Planning ☐ Shop ☐ Stores
    ☐ Engineering ☐ FAA-CMO ☐ Other: _____

12. Have you heard about Maintenance ASAP Programs? ☐ YES ☐ NO

II. EMPLOYEES OF ALL ORGANIZATIONS, **INCLUDING FAA**:

0 Not Applicable/ I don't know	1 Strongly Disagree	2 Slightly Disagree	3 Neutral	4 Slightly Agree	5 Strongly Agree

Using the scale above, please circle the number that best describes your opinion.

0 1 2 3 4 5	1.	A mechanic who knowingly uses a substitute non-approved part or lubricant at the direction of his/her immediate supervisor in order not to delay completion of a job order is exhibiting intentional disregard for safety.	0 1 2 3 4 5	11.	When a mechanic in a Part 145 Repair Station commits an error, it should be covered by the Part 121 Air Carrier's ASAP agreement, if the work was performed for that carrier.
0 1 2 3 4 5	2.	"Reckless behavior" is same as "intentional disregard for safety."	0 1 2 3 4 5	12.	Procedural violations occur regularly in maintenance tasks.
0 1 2 3 4 5	3.	Intentional falsification of a job card or a maintenance document is an example of intentional disregard for safety.	0 1 2 3 4 5	13.	Most procedural violations are not safety-critical and/or get corrected prior to them resulting in any danger to flight safety.
0 1 2 3 4 5	4.	It is difficult to tell whether a particular part or a lubricant is "approved" or not.	0 1 2 3 4 5	14.	I will report my errors if I believe that my report is likely to prevent similar errors in the future.
0 1 2 3 4 5	5.	Mechanics sign off job cards in a hurry, not realizing that one or more items on the card may not have been accomplished.	0 1 2 3 4 5	15.	I will report my errors if I believe that I will not face regulatory violation from the FAA or disciplinary action from my employer.
0 1 2 3 4 5	6.	Supervisors sign off job cards in a hurry, not realizing that one or more items on the card may not have been accomplished.	0 1 2 3 4 5	16.	I would report my errors if it was a regulatory requirement.
0 1 2 3 4 5	7.	It is my responsibility to report my errors to my supervisor, regardless of the consequences.	0 1 2 3 4 5	17.	Effective internal error reporting systems are available within my organization
0 1 2 3 4 5	8.	The FAA regulations are so inclusive that almost any procedural violation that a mechanic may commit is also a regulatory violation.	0 1 2 3 4 5	18.	NASA's ASRS program offers adequate legal protection to mechanics if they were to report their errors.
0 1 2 3 4 5	9.	My supervisor can be trusted.	0 1 2 3 4 5	19.	I know proper channels to report safety issues
0 1 2 3 4 5	10.	My safety ideas would be acted on if reported to supervisor	0 1 2 3 4 5	20.	My supervisor protects confidential or sensitive information

III. **FAA EMPLOYEES ONLY: Are/were you involved in an ASAP program? ☐ YES ☐ NO**

0 Not Applicable/ I don't know	1 Strongly Disagree	2 Slightly Disagree	3 Neutral	4 Slightly Agree	5 Strongly Agree

Using the scale above, please circle the number that best describes your opinion.

0 1 2 3 4 5	21.	The ASAP program is the best use of our resources in order to provide an honest and meaningful surveillance over an air carrier or repair station.	0 1 2 3 4 5	29.	ASAP programs tend to reduce the FAA inspectors' enforcement power and thereby dilute their role as the "watch dog" of the industry.
0 1 2 3 4 5	22.	Our office does not have the resources to support an ASAP program with any of the certificate holders	0 1 2 3 4 5	30.	My supervisor fully supports an ASAP program
0 1 2 3 4 5	23.	I would write fewer violations if my certificate holder had an ASAP program	0 1 2 3 4 5	31.	Our ASAP training is adequate.
0 1 2 3 4 5	24.	I don't like it when a mechanic is able to get off the punishment by simply filing an ASAP report.	0 1 2 3 4 5	32.	In an ASAP program, the company as well as the labor union is likely to discuss issues that would never be considered in a conventional rule violation case.
0 1 2 3 4 5	25.	I have a good working relationship with my certificate holder (air carrier/repair station)	0 1 2 3 4 5	33.	The FAA's enforcement authority is not compromised by an ASAP program
0 1 2 3 4 5	26.	Each successful ASAP case results in an increase in the level of trust between the three parties: FAA, labor, and management.	0 1 2 3 4 5	34.	The FAA inspectors trust that the company managers will follow-through on their promises and truly resolve systemic problems.
0 1 2 3 4 5	27.	The FAA inspectors need to have better and standardized training on Maintenance ASAP	0 1 2 3 4 5	35.	Failure of an existing ASAP program will be a loss to all parties involved.
0 1 2 3 4 5	28.	I am pressured by my supervisor to generate violations.	0 1 2 3 4 5	36.	Some FAA inspectors do not believe in an ASAP program

IV. EMPLOYEES OF ALL ORGANIZATIONS **WITH** MAINTENANCE ASAP (Not FAA Employees):

0 Not Applicable/ I don't know	1 Strongly Disagree	2 Slightly Disagree	3 Neutral	4 Slightly Agree	5 Strongly Agree

Using the scale above, please circle the number that best describes your opinion.

0 1 2 3 4 5	37.	Maintenance ASAP programs allow companies to solve deeply hidden systemic problems that would never have come to light otherwise.	0 1 2 3 4 5	53.	The labor union does not blindly defend everyone that submits an ASAP report (Once in a while, there are real cases of intentional disregard).
0 1 2 3 4 5	38.	Honest involvement of the FAA inspectors in the ASAP program is critical to its success.	0 1 2 3 4 5	54.	Our company managers try to resolve the systemic issues to minimize future errors.
0 1 2 3 4 5	39.	The mechanics trust that the ASAP process will allow them to disclose their error without fear of enforcement action by the FAA.	0 1 2 3 4 5	55.	We use an error classification tool such as MEDA, TAPROOT, or HFACS to classify the errors reported in our ASAP cases.
0 1 2 3 4 5	40.	The mechanics trust that the ASAP process will allow them to disclose their error without fear of disciplinary action by the Company.	0 1 2 3 4 5	56.	We use our own error classification tool to classify the errors reported in our ASAP cases.
0 1 2 3 4 5	41.	The senior company management is seriously interested in reviewing the effectiveness of our ASAP program.	0 1 2 3 4 5	57.	The company has been supportive of most reasonable requests to resolve systemic problems.
0 1 2 3 4 5	42.	The ASAP program is good use of the FAA's resources in order to provide a honest and meaningful surveillance over their air carrier or repair station.	0 1 2 3 4 5	58.	There is pressure from senior company management to keep the ASAP program running smoothly.
0 1 2 3 4 5	43.	Maintenance ASAP cases involve detailed investigations that could take months to accomplish.	0 1 2 3 4 5	59.	An ASAP program offers much stronger legal protection to the mechanics than the ASRS program (NASA Form).
0 1 2 3 4 5	44.	In our organization, labor union takes an active part in ASAP investigations	0 1 2 3 4 5	60.	Failure of an existing ASAP program will be a loss to all parties involved.
0 1 2 3 4 5	45.	Each successful ASAP case results in an increase in the level of trust between the three parties: FAA, labor, and management.	0 1 2 3 4 5	61.	In our organization, most ASAP reports are viewed to be honest mistakes.
0 1 2 3 4 5	46.	The leads and supervisors encourage mechanics to file ASAP reports.	0 1 2 3 4 5	62.	If the same mechanic files repeated ASAP reports for similar errors, the Event Review Committee tends to view the mechanic as having an intentional disregard for safety.
0 1 2 3 4 5	47.	A problem with Maintenance ASAP programs is that it is a secret. Very few people know about the success of these programs.	0 1 2 3 4 5	63.	The FAA inspectors need to have better and standardized training on Maintenance ASAP
0 1 2 3 4 5	48.	Lessons learned from Maintenance ASAP cases should be shared across companies in order to create maximum positive change in the industry.	0 1 2 3 4 5	64.	In our company, we are able to connect maintenance ASAP cases with those found on the flight side of the company.
0 1 2 3 4 5	49.	Sharing ASAP lessons, even when the names and places are de-identified, are detrimental to the overall ASAP program.	0 1 2 3 4 5	65.	Lessons learned from Maintenance ASAP cases are too specific to the organizations involved and cannot be generalized.
0 1 2 3 4 5	50.	We need an industry standard for maintenance error classification.	0 1 2 3 4 5	66.	The company managers serving on the Event Review Committees receive full support from their superiors.
0 1 2 3 4 5	51.	As long as the only source of information about a particular maintenance error was through an ASAP report, that report is considered to be a "sole source" report.	0 1 2 3 4 5	67.	FAA inspectors, company management representatives, and the labor union leaders trust that each member will carry out their roles and responsibilities to the best of their abilities.
0 1 2 3 4 5	52.	The managers trust that the FAA will not ground their entire fleet of aircraft for seemingly minor problems.	0 1 2 3 4 5	68.	The FAA inspectors trust that the company managers will follow-through on their promises and truly resolve systemic problems.

V. EMPLOYEES OF ORGANIZATIONS **WITHOUT** MAINTENANCE ASAP (Not FAA Employees):

0 Not Applicable/ I don't know	1 Strongly Disagree	2 Slightly Disagree	3 Neutral	4 Slightly Agree	5 Strongly Agree

Using the scale above, please circle the number that best describes your opinion.

0 1 2 3 4 5	69	I need to know more about ASAP programs.	0 1 2 3 4 5	87.	Our FAA inspectors do not believe in the ASAP program.
0 1 2 3 4 5	70.	Maintenance ASAP programs are very time consuming.	0 1 2 3 4 5	88.	An ASAP program is a "get out of jail free" card.
0 1 2 3 4 5	71.	Our mechanics think that the data provided through the ASAP process will be altered by our management.	0 1 2 3 4 5	89.	After hearing all the evidence, the FAA representatives on the ASAP committee/Event Review Committee may decide to call the error an intentional regulatory violation, and the management or the union cannot prevent it.
0 1 2 3 4 5	72.	Our managers have leaked confidential safety data to the press.	0 1 2 3 4 5	90.	I do not see any benefit in having an ASAP program.
0 1 2 3 4 5	73.	Our managers are not likely to be able to determine whether a mechanic has truly made an honest mistake or he/she is covering-up for a much more serious problem with his/her work ethic.	0 1 2 3 4 5	91.	ASAP is a means to force mechanics to tell on their peers so that management or FAA may be able to go after the "big offenders."
0 1 2 3 4 5	74.	Coming to an agreement between our labor and management groups regarding an ASAP program is difficult.	0 1 2 3 4 5	92.	ASAP program relies on the FAA and company management to compromise their control over the mechanics.
0 1 2 3 4 5	75.	The Aviation Safety Reporting System operated by NASA (the NASA Form) provides adequate regulatory protection to the mechanics.	0 1 2 3 4 5	93.	Our management is concerned that the FAA may find out about a systemic problem and force the company to ground a large fleet of airplanes for a relatively minor problem.
0 1 2 3 4 5	76.	Aviation Safety Action Programs are not necessary in our organization.	0 1 2 3 4 5	94.	I work for a Part 145 Repair Station. We perform maintenance for a Part 121 operator that has an ASAP program, I wish our maintenance errors were covered by their ASAP agreement.
0 1 2 3 4 5	77.	Our FAA inspectors have been our company employees.	0 1 2 3 4 5	95.	Our mechanics feel comfortable reporting safety problems to the management.
0 1 2 3 4 5	78.	I have reviewed another company's maintenance ASAP program	0 1 2 3 4 5	96.	Our management is responsive to the safety concerns raised by the mechanics.
0 1 2 3 4 5	79.	I have reviewed our company's flight ASAP program.	0 1 2 3 4 5	97	Our mechanics participate in evaluating their manager's performance.
0 1 2 3 4 5	80.	Our mechanics don't trust the company management.	0 1 2 3 4 5	98.	Our company has so many problems that it cannot afford to have an honest ASAP program.
0 1 2 3 4 5	81.	I am not clear regarding the interpretation of the term "sole source" with regard to ASAP reports.	0 1 2 3 4 5	99.	Our mechanics are afraid that the ASAP investigations will be conducted by someone who does not understand the maintenance process.
0 1 2 3 4 5	82.	Our internal safety programs are effective in improving maintenance safety.	0 1 2 3 4 5	100.	Our mechanics believe that they don't have much control over the company's negative practices. Consequently, they don't have much faith in the ASAP or similar processes.
0 1 2 3 4 5	83.	ASAP program conflicts with our company's disciplinary policy.	0 1 2 3 4 5	101.	Our managers have altered safety data in the past.
0 1 2 3 4 5	84.	The current employee morale and trust levels are not likely to be supportive of the ASAP program.	0 1 2 3 4 5	102.	ASAP programs are only effective where there are effective labor unions
0 1 2 3 4 5	85.	Our mechanics don't trust the local FAA.	0 1 2 3 4 5	103.	There are much more serious problems than ASAP that need to be addressed.
0 1 2 3 4 5	86.	Our management doesn't trust our mechanics.	0 1 2 3 4 5	104.	The current ASAP program (based on AC 120-66B) should be re-written for mechanics.